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09/683,274	12/06/2001	Paula S. Newman	110142	3363
27074	7590	09/16/2004	EXAMINER	
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			ABEL JALIL, NEVEEN	
			ART UNIT	PAPER NUMBER
			2175	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/683,274

Applicant(s)

NEWMAN, PAULA S.

Examiner

Neveen Abel-Jalil

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-19, and 24-37 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 20-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Remarks

1. The request for reconsideration filed on May 20, 2004 has been received and entered.

Claims 1-37 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 8-19, and 24-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. (U.S. Pub. No. 2002/0143871 A1) in view of Rhodes et al. (U.S. Patent No. 6,236,768 B1).

As to claims 1, and 17, Meyer et al. discloses a method for creating a light weight subject index, comprising:

identifying, as candidate headwords, words in the subject lines of a collection of documents which are not listed in a user modified common word list (See pages 1-2, paragraphs 0009-0018);

creating lexical contexts for identified candidate headwords (See page 1, paragraph 0009).

Meyers et al. does not teach ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and

listing selected candidate headwords based on the results of ranking and selection.

Rhodes et al. teaches ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index (See abstract, also see column 13, lines 20-67); and

listing selected candidate headwords based on the results of ranking and selection (See column 13, lines 20-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Meyers et al. to include ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and listing selected candidate headwords based on the results of ranking and selection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Meyers et al. by the teaching of Rhodes et al. to include ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and listing selected candidate headwords based on the results of ranking and selection because it provides for ease and customization of storage and retrieval of database records.

As to claims 2, and 18, Meyers et al. as modified discloses further comprising:  
creating the user modified common word list by modifying a list of common words by adding words to and/or subtracting words from the common word list (See Rhodes et al. column

13, lines 20-48, also see Meyers et al. page 1, paragraphs 0009-0017).

As to claims 3, and 19, Meyers et al. as modified discloses wherein the candidate headword identification system scans the subject line of a document to identify as a candidate headword each word in the subject line that does not appear in the user modified common word list, and, for each candidate headword found in the subject line, adds the candidate headword to the accumulated list of candidate headwords for the collection if the word has not been previously identified as the candidate headword for the collection, associates the entry for the word in the accumulated list with the subject line, and increments subject line occurrence counts for the word (See Rhodes et al. column 15, lines 13-23, and see Rhodes et al. column 16, lines 1-22, and see Rhodes et al. column 4, lines 5-67).

As to claims 8, and 24, Meyers et al. as modified discloses wherein the ranking system ranks the candidate headwords based on count information obtained during candidate headword selection (See Rhodes et al. column 3, lines 1-67, and see Rhodes et al. column 4, lines 1-67).

As to claims 9, and 25, Meyers et al. as modified discloses wherein the ranking system ranks the candidate headwords based on the number of unique subject lines in which a candidate headword occurs and the number of individual messages in which the candidate headword occurs in a subject line (See Rhodes et al. column 3, lines 1-67, and see Rhodes et al. column 4, lines 1-10).

As to claims 10, and 26, Meyers et al. as modified discloses wherein the ranking system selects the highest ranking headwords up to a desired index size (See Rhodes et al. column 13, lines 42-48, wherein "up to a desired" reads on "threshold").

As to claims 11, and 27, Meyers et al. as modified discloses wherein the index creation system lists each selected candidate headword in a predetermined order followed by the lexical contexts in which the candidate headword appears (See Meyers et al. page 1, paragraphs 0008-0009, also see Rhodes et al. column 6, lines 28-67).

As to claims 12, and 28, Meyers et al. as modified discloses wherein the index creation system lists each selected candidate headword in a predetermined order followed by the subject lines in which the candidate headword appears (See page 3, paragraphs 0060-0068, also see page 4, paragraphs 0082-0084, also see Rhodes et al. column 10, lines 33-67).

As to claims 13, and 29, Meyers et al. as modified discloses wherein the index creation system links the candidate headword to a representation of the set of messages in whose subject lines the candidate headword appears (See abstract, also see page 10, paragraphs 0140-0143).

As to claims 14, and 30, Meyers et al. as modified discloses wherein the index creation system links the lexical contexts in which the candidate headword appears to the set of messages in whose subject lines the lexical contexts appear (See Rhodes et al. column 6, lines 28-67).

As to claim 15, and 31, Meyers et al. as modified discloses wherein the index creation system lists the selected candidate headwords in a user specified order (See Rhodes et al. column 3, lines 25-67, and see Rhodes et al. column 4, lines 1-30).

As to claims 16, and 32, Meyers et al. as modified discloses wherein the index creation system limits the number of lexical contexts that are listed below the candidate headword (See Rhodes et al. column 13, lines 42-48, wherein "up to a desired" reads on "threshold", also see Rhodes et al. column 6, lines 28-67).

As to claim 33, Meyers et al. discloses a system for creating a user specified index, comprising:

- at least one user interface for specifying a desired index (See figure 7A, shows display of extracted meta-data);

- a document application system electrically connected to the at least one user interface (See pages 7-8, paragraph 0137);

- and an indexing system for creating the desired index, the indexing system comprising (See page 1, paragraphs 0009-0018):

- a candidate headword identification system for identifying candidate words in the subject line of a document which are not listed in a user modified common word list (See pages 1-2, paragraphs 0009-0018);

- a lexical context system for creating a lexical context for an identified candidate headword (See page 1, paragraph 0009).

Meyers et al. does not teach a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and

an index creation system for listing selected candidate headwords based on the results of ranking and selection.

Rhodes et al. teaches a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index (See abstract, also see column 13, lines 20-67); and

an index creation system for listing selected candidate headwords based on the results of ranking and selection (See column 13, lines 20-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Meyers et al. to include a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and an index creation system for listing selected candidate headwords based on the results of ranking and selection.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Meyers et al. by the teaching of Rhodes et al. to include a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index; and an index creation system for listing selected candidate headwords based on the results of ranking and selection because it provides for ease and customization of storage and retrieval of database records.



As to claim 34, Meyers et al. as modified discloses wherein the documents are stored in an archive (See Rhodes et al. column 4, lines 5-30).

As to claim 35, Meyers et al. as modified discloses wherein the document application system is a list server or a personal email application directly associated with and controlled by one of the at least one user interface (See page 1, paragraphs 0004-0009, also see page 7, paragraphs 0132-0135, also see Rhodes et al. column 13, lines 20-48).

As to claim 36, Meyers et al. as modified discloses wherein the indexing system is integrated with the document application system (See page 3, paragraphs 0054-0055, and see page 3, paragraphs 0066-0068).

As to claim 37, Meyers et al. as modified discloses wherein the at least one user interface, the document application system and the indexing system are electrically connected by at least one communication link (See Rhodes et al. column 10, lines 10-50, also see Meyers et al. page 3, paragraphs 0044-0047).

***Allowable Subject Matter***

4. Claims 4-7, and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record (Meyer et al. -U.S. Pub. No. 2002/0143871 A1- and Rhodes et al. -U.S. Patent No. 6,236,768 B1) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim), wherein the lexical context system identifies the lexical context for the candidate headword as the words to the left and the right of the candidate headword up to, but not including, a barrier word, as claimed in claims 4 and 20.

Claims 5-7, and 20-23 are allowed over the prior art made of record, because it is dependent from the object to dependent claims 4, and 20 respectively.

#### ***Response to Arguments***

6. Applicant's arguments filed on May 20, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that "the combination of Meyer et al. and Rhodes et al. fails to disclose or suggest a light weight subject indexing system with a candidate headword identification system for identifying candidate words in the subject line of a document which are not listed in a user modified common word list as recited in claims 1, 17, and 33" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the cited references in combination specifically to broadly interpret the limitation. All throughout Meyer et al. (see page 5, paragraphs 0094-0107) and Rhodes et al. subject indexes are being disclosed. Meyer et al. disclosed extracting e-mail headers and parsing subject line from the text body further creating an index as specified by the

process. Also, Rhodes et al. column 13, lines 20-67, and column 14, lines 1-10 clearly teaches a ranked list of the most relevant documents is disclosed. Once e-mail messages get extracted by subject or body, a common word list indexed in a database is created and can be searched for relevance. Extraction or parsing in itself separates needed words or content according to a predetermined requirement, therefore removing (modifying) the content of the final common word list. For further clarification, please see responses below.

In response to applicant's argument that "Meyer et al. fails to use the words "common words list" or to disclose removing words that are in a common word list, in fact Meyer et al. teaches away from identifying candidate words in the subject line or using a common word list or a user modified common word list to identify candidate words" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the combination of Meyer et al. with Rhodes et al. specifically Meyer et al. page 1, paragraphs 0010-0017 (Also see Rhodes et al. column 2, lines 25-36, and Rhodes et al. column 11, lines 11-12) wherein just the fact that parsing and extracting of e-mail messages takes place in order to create meta-information index and context thereby managing to provide a relevance match for common words received or sent by the e-mail client user does not teach away from the current application. The applicant arguments that the purpose and the use of the indexed words are different from the cited reference; is by no means is clarified in the claimed language. The cited reference do broadly disclose the teachings of the above limitation regardless whether it teaches away from the current invention since the mere existence of such basis is thereby disclosed.

In response to applicant's argument that "Rhodes et al. fails to provide any disclosure or suggestion with regard to the use of a user modified common word list, Rhodes et al. fails to identify candidates words which are not listed in a user modified common word list" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the summary of the interview held on May 11, 2004 in pointing to the combination of Meyer et al. with Rhodes et al. (See Rhodes et al. column 13, lines 20-48, and see Meyer et al. page 1, paragraphs 0009-0017) to teach the above recitation of claim 1. Meyer et al. teaches common word list on pages 3-4, paragraph 0068, and see Meyer et al. page 6, paragraph 0120; while Rhodes et al. on column 7, lines 41-65, and on column 2, lines 53 teaches user modified indexed contextual information. It is therefore still clear to The Examiner that the combination of Meyer et al. with Rhodes et al. as indicated in the office rejection as a whole read on the limitations of independent claim 1. The applicant argues that "a user modified common word list is not the same as a common word list as discussed in the applicant's specification", the examiner respectfully disagrees in stating nowhere in the claimed language does that distinction appear to be clear. There's no reason for the Examiner to presume a common word list as taught by the combination of Meyer et al. with Rhodes et al. is not modifiable. In fact, the combination of Meyer et al. with Rhodes et al. wherein Meyer et al. first discloses parsing the document received and creating a meta-information index (See Meyer et al. page 1, paragraphs 0010-0017) of common or relevant words is (See Rhodes et al. column 2, lines 25-36, and Rhodes et al. column 11, lines 11-12) is constantly filtering out (removing) or adding to the index upon the receipt of new message new relevant or common words.

In response to applicant's argument that "Rhodes et al. fails to disclose removing or adding words from/to a common word list" is fully acknowledged but is not deemed to be persuasive.

In response to the argument the applicant acknowledges on page 3 of the response that indeed Rhodes et al. teaches removing common words from a document as well as removing words listed in a common word list in order to simplify analysis. Regardless of the purpose behind the teachings of Rhodes et al. column 11, lines 11-12; it is clear to the examiner that Rhodes et al. teaches the claimed feature, furthermore, nowhere in the dependent claims language does a different purpose present itself to clarify otherwise.

In response to applicant's argument that "neither Meyer et al. nor Rhodes et al. discloses a lexical context system for creating a lexical context for identified candidate headword as recited in claims 1, 17, and 33" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the combination of Meyer et al. and Rhodes et al. in teaching indexing by relevance and lexical context derived from an e-mail message. It is clear to the Examiner that Rhodes et al. in column 7, lines 41-67, and column 8, lines 1-36 distinctly states Analysis module 133 preferably generates search queries autonomously from the current document in document buffer 140 or by reference to a current context. In the former case, analysis module 133 classifies the document either by its header or by reference to a template, and extracts the appropriate meta-information. Meta-information by definition refers to location information. While Meyer et al. on page 1, paragraphs 0008-0017 teaches extracting information

from an e-mail message by subject or headword or any other user specified type of information then creating a meta-content index which is what is typically used in a query to locate needed information. Whether the information being searched is a summarized version of the data or not, is not directly related to the claim language, instead the process of Meyer et al. extracts information from an e-mail document and sorts, indexes, meta-contexts, and presents the information to be searched for relevance (See page 5, paragraph 0093).

In response to applicant's argument that "Meyer et al. and Rhodes et al. fail to create any lexical context for any word that was identified from a subject line of a document" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the summary of the interview held on May 11, 2004 in stating that the cited art does teach "a lexical context system for creating a lexical context for an identified candidate headword" in Meyer et al. on page 1, paragraphs 0009-0010, wherein Meyer et al. teaches meta-content extraction for organization into an index which automatically indicates the content extracted from the subject of the e-mail message to be placed in a hierarchical order in an index, also see Meyer et al. figure 1, 16, create meta-content index of semantic foci, and on pages 1-2, paragraphs 0009-0018, and pages 7-8, paragraphs 0137, teaches meta-context indexing. A lexicon is already a form of corpus metadata in the sense that it contains more or less generalized descriptive facts about a corpus or introspected data. Therefore, since Meyer et al. discloses a corpus of documents and semantic foci as well as lexical items of an e-mail message, which can be extract by header on page 1, paragraphs 0009-0016, then Meyer et al. teaches lexical context for any word that was identified from a subject

line of a document. Meyer et al. further more teaches semantic foci indexing on page 2, paragraph 0019. Indicating the location of the word within the document being created and searched.

In response to applicant's argument that "Neither Meyer et al. nor Rhodes et al. discloses or suggest a ranking system for ranking the set of identified candidate headwords for a collection of documents and selecting among them for inclusion in an index as recited in claims 1, 17, and 33" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to the non-final office action wherein Rhodes et al. was introduced to teach the limitation above. Referring to Rhodes et al. column 13, lines 20-67, and column 14, lines 1-10 wherein clearly stated a ranked list of the most relevant documents is disclosed. The documents are indexed in terms of meta-information specifying contextual information about the document for example by subject or any other user defined information can searched and matched. Meyer et al. as well teach creating meta-content index based upon the extracted semantic foci, which can be the subject of the e-mail or the address or common words located within the text of the e-mail. Meyer et al. further teaches on page 1, paragraphs 0017-0018 meta-content index comprises labels facilitating parsing of the enhanced document. The process can define or more object (i.e. set of identified candidate headwords) to be included in the index further asserting that the combination of Meyer et al. with Rhodes et al. teach meta-data context, indexing, and header of e-mail messages.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114. The examiner can normally be reached on 8:30AM-5:30PM EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2175

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil  
September 14, 2004



**SAM RIMELL**  
**PRIMARY EXAMINER**